Cummins Inc.

EXECUTIVE ORDER U-R-002-0201 New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	MODEL YEAR ENGINE FAMILY DISPLA		FUEL TYPE	USEFUL LIFE (hours)		
2003	3CEXL0409AAA	6.7	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler			Tractor			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER	EMISSION STANDARD	EXHAUST (g/kw-hr)				OPACITY (%)				
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 <u><</u> kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
130 <u><</u> kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
 .		CERT			5.8	0.7	0.20	12	2	26

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

2874

day of January 2003.

Allendyons, Chief

Mobile Source Operations Division

Engine Model Summary Form ਭੁਸਕਿਸਮਦਾਮਾ ਤ੍ਰਿ (ਤਦੇ)

Manufacturer: Cummins Inc.

EPA Engine Family: 3CEXL0409AAA Engine category: Nonroad over 50 hp

Mfr Family Namé: A833

Process Code:

New Submission

8362;FR9994 8362;FR9994 8362;FR9996 8362;FR9996	1.Engine Code
86.7-VE-TAA 86.7-VE-TAA 86.7-VE-TAA 86.7-VE-TAA	2.Engine Model
184@2200 166@2200 142@2200 121@2200	3.DHP@RPM (SAE Gross)
76 89 86	4.1-uel Rate: minVstroke @ peak HP (for diesel only)
74.2 66.0 56.4 49.0	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)
575@1400 521@1400 423@1400 378@1400	6.Torque @ RPM (SEA Gross)
113 102 86 75	7.Fuel Rate: मभार/stroke@peak torque
53.3 48.2 40.6 35.4	8.Fucl flate: (lbs/hr)@peak torque
575@1400 113 53.3 DDI,TC,CAC - 521@1400 102 48.2 DDI,TC,CAC 123@1400 86 40.6 DDI,TC,CAC 378@1400 75 35.4 DDI,TC,CAC	8.Fuel flate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930

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